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# GEOGRAPHICAL PUBLICATIONS

## (Reviews and Titles of Books, Papers, and Maps)

*For key to classification see "Explanatory Note" in Vol. II, pp. 77-81*

## NORTH AMERICA

### General

DALY, R. A. **Geology of the North American Cordillera at the forty-ninth parallel. Part I:** xxvii and 546 pp.; maps, diagrs., ills.; **Part II:** xxvii and pp. 547-857; diagrs., ills., index; **Part III:** maps and ills. in pocket. Introduction by R. W. Brock. *Geol. Survey of Canada Memoir No. 38.* Ottawa, 1912.

This memoir is a record of geologic work subsidiary to that of the International Boundary Survey. The field work occupied six seasons. A strip varying in width from 4 to 12 miles was mapped on a scale of 1 inch to the mile. The topography of most of this area is shown by contour lines at intervals of 100 feet. West of longitude 116° 30′ the strip mapped lies wholly in Canada. East of that it laps over from 2 to 4 miles into the United States. An east-west structural section accompanies each map throughout the entire distance of nearly 400 miles. The report is primarily geological, but the following chapters are of geographic interest: Chapter 3, Nomenclature of Ranges, pp. 17-46; Chapter 21, Glaciation, pp. 577-598; Chapter 22, Physiographic Notes, pp. 599-642.

The nomenclature of these ranges has been in a state of confusion. Even the terms "Rocky Mountains" and "Selkirks" are given very diverse applications by different writers. Daly's attempt to reduce the naming to a consistent system [first published in the *Geogr. Journ.*, Vol. 27, 1906] is therefore highly welcome and it is to be expected that it will exert a great influence on future writings. It appears that on the whole a serious attempt has been made to abide by prevalent usage in so far as any usage can be said to be prevalent, provided only that the limits of the several ranges shall be determined by some good reason. It is aptly pointed out that the mountains along the International Boundary do not constitute distinct "ranges" in any such sense as do the mountains of Colorado and Wyoming. Almost the whole breadth of the Cordilleran belt in our northern states is filled with mountains, not very unlike in appearance throughout most of the distance. Under such circumstances Daly would make primary divisions by selecting as boundaries the largest and most continuous valleys. Of such valleys, four are deemed to be of the first order, two of them being styled trenches. A trench, in this sense, is defined (p. 26) as "a long narrow intermontane depression occupied by two or more streams (whether expanded into lakes or not) alternately draining the depression in opposite directions." The four first-rank valleys or trenches are here named in order, with the longitude at which each crosses the 49th parallel and the river which occupies it at that place: Rocky Mountain Trench (115°, Kootenay River flowing south); Purcell Trench (116° 30′, Kootenay River flowing north); Selkirk Valley (118°, Columbia River); Okanagan Valley (119° 30′, Okanagan River). The entire Cordilleran belt in latitude 49° east of Puget Sound is thus divided into five mountain systems, the Rocky Mountain, Purcell, Selkirk, Columbia, and Cascade systems. The "Rocky Mountains" are thus reduced to a belt about 50 miles wide lying east of Flathead Lake and the Kootenay River. Many will, no doubt, take exception to Daly's use of this term. In judging of any proposed nomenclature the chances of securing general adoption should always be taken into account. In this case the chances that any man or organized body can restore the name Rocky Mountains to its former narrow application are very small indeed. His emphasis on the term *Cordillera* for all the highlands between the Pacific Ocean and the Great Plains is well placed. A more general use of this term would save the words "Rocky Mountains" from some of the worst misapplications. The insistence on the Spanish pronunciation seems to us less wise. Webster's International Dictionary sensibly adopts the English. Insistence on a foreign pronunciation can only retard the general adoption of this much-needed term.

To the physiographer the most interesting part of this work is that which assails the position which peneplanes have held in the interpretation of mountain topography. A subequality of altitude among crests within a single view prevails throughout the entire area, with the single exception of the Front Range in Glacier National Park. As approximate base leveling is affirmed by Willis for the first range west of this and since the Cascade Mountains have been pronounced an upraised and dissected peneplane by Willis, Smith, Russell, and others, it may safely be asserted that this would be the orthodox interpretation of the entire Cordillera in this latitude (perfection of peneplaning is of course not assumed). Daly combats this hypothesis and assumes on the contrary that high mountains tend to assume equal heights by the more rapid degradation of the higher crests. Thus accordance of heights is made incident to mountain degradation in its first cycle, and the two-cycle history is discarded. He finds reason to think that there has been a rather general uplift of several thousand feet in late Tertiary time, but this is treated as incidental and bearing no necessary relation to the accordance of crest heights.

The main objections to the two-cycle theory are (1) the absence of peneplane remnants, thus resting the whole argument for two cycles on accordance of crests; (2) the lack of stream adjustment; (3) the shortness of the time allowed for the making and destruction of the last peneplane when compared with the time which peneplanes elsewhere have endured. Under (1) the only high level surfaces deserving consideration are those of the Okanagan (Cascade) Range, and these Daly suspects to be determined by batholiths recently unroofed by erosion, but capable of other explanations also. Under (2) he finds the character of the drainage essentially the same from the Great Plains to Puget Sound, i. e. mainly consequent, with little or no subsequent drainage or adjustment to strong and weak rocks, even where contrasts of hardness are marked, unless some of the streams following fault lines may in part have selected these lines because of their weakness. He cites the well-known principle that adjusted drainage is one of the marks of second-cycle erosion. Under (3) he points to the fact that the Cascade peneplane is assumed to have been developed from a mountainous country since the beginning of the Miocene and by some writers since its close, then uplifted in the late Pliocene or possibly even early Pleistocene, since which time it has been (in the mountains) wholly destroyed. This rate of making and destroying peneplanes he thinks wholly out of proportion to that which is shown in the east by the well-preserved Cretaceous and Tertiary peneplanes, even allowing for the fact that alpine conditions must be assumed in the Cascades.

The constructive side of Daly's work appears in his provision for crests of uniform height through other means. He considers (1) isostasy, both during uplift and after its cessation; (2) the assumed regular forms of upper surfaces of batholiths and metamorphosed mountain cores; (3) cirque erosion; (4) influence of tree line, which is often not far from the cirque level (the tendency of mountain crests to be leveled to tree line and the cirque level was strongly stated by George Dawson in 1896); and (5) the subequal spacing of streams during maturity (Richter, Tarr, and others). Many processes are contrasted in their effectiveness above and below the tree line. He finds that all the mountains on the boundary show accordant summits at elevations very close to their ''effective tree line'' and concludes that many so-called peneplane remnants may owe their existence to the influence of the tree line rather than to that of base level.

Daly's general conclusions concerning accordant alpine crests and their explanation were published in the *Journal of Geology* in 1905. The present work adds discussions of concrete cases. Although these hypotheses have been before the geologic world for some years, no considerable tendency is observed among American physiographers to follow them. On the other hand, it is but fair to say that no other country is so wholly ''addicted to the use'' of peneplanes as is the United States. Apparently also the lack of stream adjustment in these western mountains deserves more consideration than it has received. So also does the great discrepancy between the assumed durations of erosion cycles in the Cordilleran and Appalachian belts. The *tendency* of crests to halt in their degradation at tree line and the cirque level is undisputed, but as yet no example of even crests due to this process is acknowledged by all physiographers. On the other hand there *are* unchallenged peneplanes even at mountain tops, as, for example, in the Front Range of Colorado. Indeed, the Rocky Mountain peneplane in Colorado assumes a role of some importance in considering the mountains farther north, for between South Park and southern Canada accordant crests are found so abundantly and at such short intervals that it would be difficult to say just where to begin to challenge the peneplane theory.

Daly has well remarked the need of quantitative work to determine the adequacy of forces which are well known to work in the direction of accordant crests. In the meantime, as between the two processes at issue, what can analytical, *deductive* study (such as Davis has so forcibly urged and so ably used) do to determine more exactly the sequence of forms involved in each method, with a view to determining criteria for discriminating between their results? N. M. FENNEMAN

## Canada

### *Alberta, Saskatchewan, Manitoba*

Denis, L. G., and J. B. Challies. **Water-powers of Manitoba, Saskatchewan, and Alberta.** ix and 334 pp.; maps, diagrs., ills., bibliogr., index. Commission of Conservation, Toronto, 1916.

Dowling, D. B. **The southern plains of Alberta.** 200 pp.; maps, diagr., ills., index. *Geol. Survey of Canada Memoir 93: Geol. Ser. No. 78.* Ottawa, 1917.

Hines, J. **The red Indians of the plains: Thirty years' missionary experience in the Saskatchewan.** viii and 322 pp.; maps, ills. Society for Promoting Christian Knowledge, London, 1915. 6s. 9 x 6.

Mawson, T. H., and Sons. **Calgary: A preliminary scheme for controlling the economic growth of the city.** xiii and 88 pp.; maps, diagrs., ills. Published under the auspices of the City Planning Commission of Calgary. Thomas Mawson & Sons, London, Lancaster, Vancouver, and New York, [1914]. $2.00. 12½ x 10.

Mitchell, A. E. **The mountain maze of the upper Athabaska.** Map, ills. *Travel,* Vol. 29, 1917, No. 4, pp. 30-33 and 45-46.

Oliver, Edward. **Ninth Annual Report of the Secretary of Statistics for sixteen months ended April 30, 1916.** 58 pp.; map, index. Dept. of Agric., Province of Saskatchewan, Regina, 1916. [For reference to section on wheat crop see note in July, 1917, *Review,* Vol. 4, p. 58.]

Rose, Bruce. **Wood Mountain-Willowbunch coal area, Saskatchewan.** ii and 103 pp.; maps, ills., index. *Geol. Survey of Canada Memoir 89: Geol. Ser. No. 75.* Ottawa, 1916. [Abstracted in the March, 1917, *Review,* Vol. 3, pp. 241-242.]

Tyrrell, J. B. **Notes on the geology of Nelson and Hayes Rivers.** Maps, ills. *Trans. Royal Soc. of Canada,* Ser. 3, Vol. 10, 1916, pp. 1-27.

—— ***Alberta. Studies in duty of water and climatic conditions.*** 1 in. to 42 mi. (1:2,600,000) approx. Irrigation Office, Dept. of Interior, Ottawa, 1913.

—— [Four maps:] (1) ***Alberta, Northern,*** (2) ***Southern Alberta,*** (3) ***Manitoba,*** (4) ***Saskatchewan [showing] Dominion electoral divisions.*** 1:792,000. Dept. of the Interior, Ottawa, 1914 and 1915.

—— [Three maps:] (1) ***Alberta, Northern,*** (2) ***Southern Alberta,*** (3) ***Manitoba, showing disposition of lands. . .*** 15th edit., corrected to January 1, 1917. 1:792,000. In 2 sheets. Dept. of the Interior, Ottawa, 1917.

—— [Three maps:] (1) ***Alberta, Southern,*** (2) ***Manitoba,*** (3) ***Saskatchewan, Cereal maps of, showing acreage under crop in each township in wheat, oats, barley, and flax during 1915.*** 1:792,000, or 1 in. to 12½ mi. 4th edit. Railway Lands Branch, Dept. of the Interior, Ottawa, 1916.

—— ***Manitoba, Saskatchewan, and Alberta, showing the land registration and judicial districts.*** Preliminary edit. 1:2,217,600. Compiled from information supplied by Provincial Governments. Railway Lands Branch, Dept. of the Interior, Ottawa, 1917.

## United States

### *General*

Schanz, Moritz. **Baumwoll-Anbau, -Handel und -Industrie in den Vereinigten Staaten von Nordamerika.** Bibliogr. *Beihefte zum Tropenpflanzer,* Vol. 15, 1915, No. 6, pp. 513-645.

The author is a member of the German colonial committee for the investigation of cotton, and his observations are the result of first-hand observations in the cotton states. The monograph is admirable in the presentation and arrangement of essential facts; there are few publications in English that give in brief compass so complete a view of the cotton industry in all its phases. Since most of the facts are readily accessible and more or less familiar to American readers, one's interest centers mainly in (1) what the author seems to regard as exceptional or distinctive and (2) his conclusions as to future conditions.

Our somewhat familiar demonstration agent (*Wanderlehrer*) of the U. S. Department of Agriculture is rightly accorded a high place in rural progress, although he is not unknown in Germany. On the other hand, two rural conditions are rightly criticized. The farm credit system is rightly described as almost unorganized, with a consequent high interest rate, in contrast, of course, to the efficient credit systems in many countries of Europe. This criticism will probably not hold when the full effects of the Farm Loan Act of 1916 become apparent. The tenant share system and the changing, uncertain supply of labor are rightly described as retarding the development of the cotton-growing South.

This expert observer is much impressed with the potentialities of the South. The soils, which are as a whole productive, and the favorable climate point in the author's opinion to a high agricultural prosperity, while iron, coal, and petroleum invite manufactures. The main retarding factor is a scarcity of skilled labor. In 1912 the cotton-growing South produced 62.8 per cent of the world's cotton—a proportion which renders textile industry dependent on American cotton. He notes that there is a distinct tendency in America to consume the home crop and to export cotton goods rather than to export raw cotton, and the only relief to European industry from ''American monopoly'' would be to raise cotton outside the United States. The author, however, does not express any expectation that this will be done nor does he suggest any means of increasing the production of cotton in other parts of the world.

The principal topics treated are: history of cotton; size of farms; land prices and farm leases; labor supply; farm credits; government organizations; soils and fertilizers; climate; seed and field cultivation; diseases and pests; harvesting; cotton seed and derived products; co-operative organizations; handling of the raw product; exports; retrospect and outlook. F. V. Emerson

—— **Weather Bureau, Report of the Chief of the, 1916-1917.** 291 pp.; map. Weather Bureau, Dept. of Agriculture, Washington, D. C., 1917.

That the trained meteorologist is indispensable in the conduct of modern warfare has been abundantly proved by the importance of the part played by the weather forecasts made daily for the military commanders of the opposing armies in the great war. The weather conditions, from day to day, and from season to season, have had many and obvious effects upon general plans of campaign and upon the ordinary daily military operations, as has been pointed out in a series of articles by the present reviewer. It is, therefore, natural that in his last *Annual Report* the Chief of the Weather Bureau, Professor Charles F. Marvin, should emphasize the contributions which our own weather service has made, and is making, toward the effective carrying on of our part in the war. The immediate services which have been rendered are (1) the despatch to Europe of one of our foremost forecasters, who has been commissioned major in the Signal Officers' Reserve Corps, and (2) the extension of the work of sounding the upper air for the benefit of aviators, balloonists, and artillerists. The official in charge of the aërological investigations of the Bureau has also been commissioned a major in the Signal Officers' Reserve Corps and, according to published newspaper statements, has also been sent abroad. In connection with our own meteorological work abroad, it is a satisfaction to note that ''it is expected that the closest co-operation will exist with the French and English meteorological services in the use of data obtained by them, supplemented by additional observations in the field and cable reports from the United States and its possessions.''

Many other activities of the Weather Bureau are given special mention by Professor Marvin. Among these a few may here be noted. The West Indian and Caribbean Sea service has been extended. Two daily observations are now taken from June 1 to November 30 and one a day for the remainder of the year. Plans have been made for more practical application of the results of free-air investigations to problems connected with aëronautics and the firing of projectiles. Work has progressed on the meteorological section of the new Atlas of American Agriculture. The precipitation section, consisting of 80 charts and diagrams and about 15,000 words of text, is in the printer's hands. The new Division of Agricultural Meteorology was established February 21, 1916. This department is to conduct ''studies of every character of the relation of weather and crops'' and to collect the statistical data required in such studies. It conducts investigations of the relations between weather and climate and the growth and yield of crops and in a general way supervises the activities of the Weather Bureau which have to do particularly with agriculture. It is not generally known that among the Weather Bureau's activities are included special storm warnings for sheep interests in Oregon, Washington, and Idaho; three- or four-day forecasts during the rice harvest in Arkansas; potato frost warnings in Colorado; special forecasts for alfalfa growers throughout the West; special frost warning service in the interest of fruit growers in several sections, and of cranberry growers in Massachusetts, Wisconsin, and New Jersey. R. DeC. Ward

Harper, R. M. **Some movements of state centers of population and their significance,** *Journ. of Geogr.*, Vol. 15, 1916-17, No. 7, pp. 227-231. [An interesting and condensed note on the location of the centers of population in various states, and reasons for recent changes in location. The detailed sections are preceded by a useful summary of principles.]

MARVIN, C. F. **Organization of meteorology and seismology in the United States.** *Proc. 2nd Pan American Sci. Congress, Dec. 27, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 768-779. Washington, D. C., 1917.

REED, W. G. **Frost in the United States.** Maps, diagrs. *Proc. 2nd Pan American Sci. Congress, Dec. 27, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 593-631 (discussion, p. 631). Washington, D. C., 1917.

SNELL, B. H. **Mississippi River flood control.** Extension of remarks in House of Representatives, May 17, 1916. Extract from *Congressional Record,* p. 9392. Washington, D. C.

VOORHEES, J. F. **Climatic control of cropping systems and farm operations.** *Proc. 2nd Pan American Sci. Congress, Dec. 27, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 127-132 (discussion, pp. 131-132). Washington, D. C., 1917. [Deals with the United States.]

WELLS, E. L. **The economic aspect of climatology.** Bibliogr. *Proc. 2nd Pan American Sci. Congress, Dec. 27, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 240-249 (discussion, 247-249). Washington, D. C., 1917. [Mainly with reference to conditions in the United States.]

### *North Atlantic States*

MCADIE, ALEXANDER. **The winds of Boston and vicinity, Part II.** Maps, diagrs. *Annals Astron. Observ. of Harvard College,* Vol. 83, 1917, Part I, pp. 28-46.

The first part of Professor Alexander McAdie's "Winds of Boston and Vicinity" was reviewed in the February, 1917, *Review* (Vol. 3, p. 160). In this second part several general matters, essentially meteorological in character, are considered, such as the general circulation of the atmosphere and cyclonic theories. The author is of opinion that much has been written concerning pressure gradients in the equatorial regions which is not in accord with the temperature data and surface flow as given in the "Réseau Mondial" for certain trade-wind latitudes. It seems more logical to begin with the falling masses of cold air in the polar regions than with the heating of the equatorial regions as the prime motive force in the general circulation. The more strictly climatological portion of the discussion concerns the relation of wet and dry seasons to the general pressure distribution over the North Atlantic. In *warm* winter months there is a decided increase in the surface flow of air from the *southwest.* This condition would result from a slight displacement of the Bermuda "hyperbar" westward and a displacement of the Atlantic "infrabar" eastward. (The terms *hyperbar* and *infrabar* were suggested by Professor McAdie in 1910, as being "more appropriate and distinctive" than the term "centers of action" introduced by Teisserenc de Bort in 1881). In a *wet* spring month the Atlantic infrabar is displaced westward, and southerly winds prevail. In a *dry* spring month and also in a *cold* winter month the Atlantic infrabar is farther east, and an excess of northwest winds results. The purpose of the discussion is to lay the foundation for seasonal forecasts based primarily upon the flow of the larger air streams. It is found that the path and frequency of cyclones crossing New England are controlled by the prevailing flow from the west, modified by the north and south components of the general circulation. R. DEC. WARD

ALLING, H. L. **Glacial lakes and other glacial features of the central Adirondacks.** Maps, diagr., ills. *Bull. Geol. Soc. of America,* Vol. 27, 1916, No. 4, pp. 645-672.

BARKER, E. E. **Ancient water levels of the Crown Point embayment.** Maps, diagrs., ills., bibliogr. *New York State Museum Bull. No. 187,* pp. 165-190. Albany, 1916. [Three maps show successive stages of the embayment during the northern retreat of the Hudson-Champlain glacier; a fourth map shows the approximate extent of the subsequent marine invasion and a fifth map the distribution of topographic related features and soil types.]

FAIRCHILD, H. L. **Post-glacial marine submergence of Long Island.** Maps, bibliogr. *Bull. Geol. Soc. of America,* Vol. 28, 1917, No. 2, pp. 279-308. [Presenting facts to "prove that the southern and the eastern plains were formed as a submerged marine plain."]

Farrand, Beatrix. **The National Park on Mount Desert Island.** Ills. *Scribner's Mag.,* Vol. 61, 1917, No. 4, pp. 484-494. [A popular description of the Sieur de Monts "Park" (though it should be said that it is officially named the Sieur de Monts National "Monument"), accompanied by good photographs. See note on this subject in the *Review,* Vol. 2, 1916, p. 375.]

Ford, W. C., edit. **Commerce of Rhode Island, 1726-1800. Vol. II: 1775-1800.** xi and 501 pp.; ill., index. (Massachusetts Historical Soc. Collections, 7th Ser., Vol. 10.) Boston, 1915. $3.00. 9½ x 6½.

Gagnon, Alphonse. **Le Vinland.** *Bull. Soc. de Géogr. de Québec,* Vol. 11, 1917, No. 2, pp. 114-119. [The conclusions of the author, identifying Vinland with the shores of Massachusetts or Rhode Island, are in close agreement with those reached by W. H. Babcock and stated by him at the last congress of Americanists held in Washington, December 1916. Cf. also his "Markland, Otherwise Newfoundland" in the October, 1917, *Review.*]

—— **Sieur de Monts National Monument; The White Mountain National Forest.** 30 and 34 pp.; ills. *Sieur de Monts Publs. 17.* Wild Gardens of Acadia [Bar Harbor, Me.], and U. S. Dept. of the Interior, Washington, D. C., 1917.

## SOUTH AMERICA

### Paraguay, Uruguay, Argentina, Chile

Beltrán, J. G. **Geografía de la Argentina, física, política y económica.** 332 pp.; maps, diagrs., ills. Cabaut y Cía. and A. García Santos, Buenos Aires, 1917. 7½ x 5.

This is a textbook intended for the use of secondary schools, normal schools, and advanced students. As such it is meager and reveals the backward state of education in Latin America. The typography, text-maps, and illustrations are poor. Yet the work marks a distinct advance in geographical method for those countries. Instead of being limited to the bare enumeration of rivers, towns, ports, mountains, lakes, cities, etc., it contains a discussion of such mattters as immigration, colonization, commercial and industrial development, transportation, and city growth. An occasional attempt is made to show the relation of man to his environment. Graphical representations are employed to illustrate density of population, amount of foreign trade, meteorological conditions, distribution of vegetation, and composition of the soil in different parts of the republic. The author's treatment of boundaries is almost entirely historical rather than geographical. The statement (p. 148, note) that atmospheric pressure increases with the amount of water vapor present is, of course, incorrect, as is also his assertion that pressure over the ocean is higher in summer than in winter. The reverse is usually true, the gradient, however, being the decisive factor in the formation of winds.

In spite of these defects the book is of special value to the foreigner as it contains a wealth of up-to-date data regarding Argentina.

Araújo, Orestes. **Historia de los Charrúas y demás tribus indígenas del Uruguay. Part I: Etnología salvaje.** 142 pp. J. M. Serrano, Montevideo, 1911. 7 x 5. [At the time of the Spanish discovery the Charruas resided on the northern shores of the Rio de la Plata.]

—— **Argentine Republic: General descriptive data.** 31 pp.; map, ills. Pan American Union, Washington, D. C., 1917.

—— **Chubut—one of Argentina's territories.** Ills. *Bull. Pan American Union,* Vol. 44, 1917, No. 5, pp. 607-617. [Spanish version in *Bol. Unión Panamericana,* Vol. 45, 1917, No. 1, pp. 1-10.]

Groeber, Pablo. **Informe sobre las causas que han producido las crecientes del Rio Colorado [Territorios del Neuquén y La Pampa] en 1914.** 29 pp.; maps, diagrs., ills. *Bol. Direcc. Gen. de Minas, Geol., e Hidrol. No. 11, Ser. B (Geol.).* Minist. de Agric., Buenos Aires, 1916.

Hudson, W. H. **The Purple Land: Being the narrative of one Richard Lamb's adventures in the Banda Orientál, in South America, as told by himself.** With an introduction by Theodore Roosevelt. x and 355 pp. E. P. Dutton & Co., New York, 1916. $1.50. 7½ x 5. [First published in 1885 as "The Purple Land That England Lost." A story of life in Uruguay.]

Keidel, J. **La geología de las sierras de la provincia de Buenos Aires y sus relaciones con las montañas de Sud África y los Andes.** 78 pp.; maps, diagrs., ills., bibliogr. *Anal. del Minist. de Agric. Sección Geol., Mineral., y Minería,* Vol. 11,

1916, No. 3. Direcc. Gen. de Minas, Geol., e Hidrol., Buenos Aires. [The sierras of Buenos Aires Province are composed of Paleozoic rocks resting discordantly upon ancient crystallines. Their internal structure is attributed to movements taking place in late Paleozoic time. Such movements were separated by a long interval from the regional movements (Tertiary) to which the sierras owe their present elevation. Stratigraphically and tectonically they have close affinity with the Pre-Cordillera of San Juan and Mendoza, on the one hand, and with the Cape plateau of South Africa on the other. Their relation to the Andes may be compared with that obtaining between the ancient blocks of Europe and the folded Alps. The report is well illustrated with maps and diagrams and provided with a bibliography.]

MARTINOLI, GAETANO. **Cattle breeding in the Argentine Republic at the present day.** *Monthly Bull. of Agric. Intelligence and Plant Diseases,* Vol. 8, 1917, No. 8, pp. 1073-1084. Internatl. Inst. of Agric., Rome.

MORANDI, LUIS. **Frecuencia y modalidad de las calmas horarias en Montevideo, período 1906-1914.** 22 pp.; diagr. Inst. Nacl. de Agronomía, Montevideo, 1915. [A study of air currents with special reference to their constancy as a source of power. Uruguay, being largely a land of plains and gentle slopes, is poorly supplied with water-power, but, the author thinks, should be able to make an extensive use of windmills. Land and sea breezes are felt far inland, and there are few hours of absolute calm, especially at an altitude of 25 meters above the ground. The data collected may be of value also in aviation.]

MORANDI, LUIS. **Resumen y discusión de las observaciones meteorológicas del Observatorio Central, período 1901-1915.** 19 pp.; ills. Inst. Nacl. Físico-Climatológico, Montevideo, 1917. [Abstracted in the December, 1917, *Review,* Vol. 4, p. 488.]

ROSS, GORDON. **Argentina and Uruguay.** xv and 308 pp.; map, diagrs., ills., index. The Macmillan Co., New York, 1916. 9 x 6. $3.50.

—— ***North Shore of the Plata River: Sauce Point to Martin Garcia Island. From British surveys in 1844 and 1856, with additions of Argentine surveys to 1911.*** [1:84,000.] Inset: Sauce Harbor, 1:16,000. *U. S. Hydrogr. Office Chart No. 2703.* Washington, D. C., 1917.

—— ***Uruguay River: Juncal I. to Concepcion del Uruguay. From Argentine surveys between 1901 and 1910.*** [1:100,000.] Inset: Gualeguaychu River. *U. S. Hydrogr. Office Chart No. 2705.* Washington, D. C., 1917.

## EUROPE

### BALKAN STATES, INCLUDING RUMANIA

LEFEUVRE-MÉAULLE, H. **La Grèce économique et financière.** Preface by Paul Deschanel. x and 258 pp. Félix Alcan, Paris, 1916. 3 fr. 50. 7½ x 4½.

Dealing principally with the natural resources of Greece, this book explains the country's economic position in the Near East. Its author has peculiar competence to write on these subjects in view of a long term of residence in the Levant as French commercial agent. This enables him to sketch in effective touches the possibilities of developing Greece's agriculture and industry. An excellent chapter on the territorial additions following the Balkan War shows how important was Greece's gain. To Saloniki and its value as a center of trade much space is devoted. The book will appeal to those who are interested in the new trends of Greek economic life after the war.

ALMAGIÀ, ROBERTO. **Note di cartografia albanese.** Maps. *Riv. Geogr. Italiana,* Vol. 23, 1916, No. 6-7, pp. 269-277.

DAINELLI, GIOTTO. **Quanti sieno gli Italiani in Dalmazia?** *Riv. Geogr. Italiana,* Vol. 24, 1917, No. 3-4, pp. 132-147.

DEDIJER, JEVTO. **La transhumance dans les pays dinariques.** *Ann. de Géogr.,* No. 137, Vol. 25, 1916, pp. 347-365.

DEDIJER, JEVTO. **Traces glaciaires en Albanie et en Nouvelle Serbie.** Map, diagrs. *La Géographie,* Vol. 31, 1916-17, No. 5, pp. 325-336. Paris.

MANETTI, CARLO. **Appunti sulla pastorizia albanese.** Ills. *L'Agricoltura Coloniale,* Vol. 9, 1915, No. 4-5, pp. 212-216. Florence.

NEWBIGIN, MARION. **Balkan outlets in the present and in the future.** *Geogr. Teacher,* No. 46, Vol. 8, 1916, Part 6, pp. 333-340.

NICULESCU, C. **Contributions à la géologie de l'Epire (environs de Janina).** Diagrs. *Bull. Section Sci. de l'Acad. Roumaine,* Vol. 3, 1914-15, No. 1, pp. 23-34. Bukharest.

PEDRAZZI, ORAZIO. **La Dalmazia e gli slavi del sud.** *Boll. Reale Soc. Geogr. Italiana,* Vol. 6, 1917, No. 4-5, pp. 270-282. Rome.

PERNICE, ANGELO. **Origine ed evoluzione storica delle nazioni balcaniche.** xii and 628 pp.; maps, bibliogr. Ulrico Hoepli, Milan, 1915. L.6.50. 8 x 5. [A guide to the history of the Balkan Peninsula, with a description of the geography of the area as a factor in its history.]

RICCHIERI, GIUSEPPE. **Il fato geografico nella storia della penisola balcanica.** Maps. *Boll. Reale Soc. Geogr. Italiana,* Vol. 6, 1917, No. 6, pp. 401-435. Rome.

STEBBING, E. P. **The Serbian front in Macedonia.** Map, ills. *Scottish Geogr. Mag.,* Vol. 33, 1917, No. 4, pp. 145-157.

STEFANO, SANTUCCI. **Un viaggio nell'Albania settentrionale.** Ills. *Boll. Reale Soc. Geogr. Italiana,* Vol. 5, 1916, No. 8, pp. 646-672; No. 9, pp. 749-777; No. 10, pp. 805-823. Rome.

WOODS, H. C. **Rumania and the Danube.** Map. *Asiatic Rev.,* No. 28, Vol. 10, 1916, pp. 373-381.

—— ***Balcani, 1916, L'intervento Europeo nei.*** 1:1,500,000. Inset: I Rumeni della Transilvania e Ungheria. Istituto Italiano d'Arti Grafiche, Bergamo, 1916. [The boundaries of the Balkan states are those of the treaties of London and Bukharest, 1913.]

—— ***Balkan States, Map of the, showing communications to illustrate the paper by H. C. Woods.*** 1:1,750,000, or 1 in. to 27.62 mi. Accompanies "Communications in the Balkans" by H. C. Woods, *Geogr. Journ.,* Vol. 47, 1916, No. 4, pp. 265-293.

—— ***Balkan area (Philips' large-scale strategical war map of Europe).*** 1:1,140,000, or 1 in. to 18 miles. George Philip & Son, Ltd., London, [1917].

## ASIA

### MANCHURIA, KOREA, JAPAN

MORSE, E. S. **Japan day by day—1877, 1878-79, 1882-83. Vol. 1:** xv and 441 pp.; diagrs., ills. **Vol. 2:** 453 pp.; diagrs., ills., index. Houghton Mifflin Co., Boston and New York, 1917. $8.00. 9 x 7.

As many-minded as Ulysses, humorous as Aristophanes, learned as Darwin, and persuasive as Benjamin Franklin—such is the venerable professor who in his eightieth year delights an expectant world by publishing some notes made forty years ago in the Japan of semi-modern, semi-medieval aspect. These volumes are the work of a scientifically trained scholar who united the learning of an Agassiz or a Schliemann with the humorous charm of a Gilbert or a Mark Twain. We see him at one moment penetrating the mystery of prehistoric man in Dai Nippon, the next convulsing with laughter the gravest assembly in a country of cultivated gravity.

We frankly suspend criticism in treating of these precious volumes. We fall in love with the irrepressible boyishness of this learned graybeard. We love his book as we love Dr. Johnson—because of his faults no less than his virtues. Morse champions the worn-out Chinese and Turkish views on inoculation for smallpox along with a superstitious reverence for the Darwinian descent from monkeys. But what of that? Dr. Johnson was even worse; and we read and re-read him with delight. It is this quality of frankness, of enthusiasm, of explosive indignation, of profound erudition coupled with infinitely human sympathy and understanding that makes these volumes worthy of notice.

From a geographical point of view the work illustrates abundantly the close relation between the habits of a people and soil and climate that influence them. Many customs which Professor Morse was at first inclined to ridicule proved later to be the result of forces which he had not appreciated at the first glance. Indeed, rather than applaud Japan for her immense capacity for imitating "western" culture we are of opinion that time and reflection will cause her soon to discard many so-called reforms which, while suited to our conditions, are costly, cumbersome, and unsuited to a land whose physical characteristics have no parallel in any other part of the world.

POULTNEY BIGELOW

GJELLERUP, P. **Dagligt liv i Tokio i vor tid.** *Geografisk Tidskrift,* Vol. 23, 1916, No. 6, pp. 237-243. [Daily life in Tokyo in our time.]

HANABUSA, NAOSABURO. **État de la population de l'Empire du Japon au 31 Décembre 1913.** [ix] and 335 and xxxviii pp. Bur. de la Statistique Générale, Cabinet Impérial, Tokyo, 1916.

—— **Japon, l'Empire du, Exposé général des résultats du recensement de la population de, à la fin de 1913.** v and 179 pp. Bur. de la Statistique Générale, Cabinet Impérial, Tokyo, 1916. [In Japanese.]

### MALAY ARCHIPELAGO, INCLUDING THE PHILIPPINES

ABENDANON, E. C. **Bijdragen tot de historische cartographie van den Ned. Ind. Archipel.** *Tijdschr. Kon. Nederl. Aardrijk. Genoot.,* Vol. 34, 1917, No. 6, pp. 862-877.

CRAIG, AUSTIN, and CONRADO BENITEZ. **Philippine progress prior to 1898.** 136 pp.; maps. (A Source Book of Philippine History, Vol. 1.) Philippine Education Co., Inc., Manila, 1916. 9 x 6½. [Part I discusses agriculture, industry, and commerce at the time of the discovery; commerce during the restrictive period of Spanish control and during the nineteenth century.]

MILLER, H. H. **Commercial geography: The materials of commerce for the Philippines.** 121 pp.; maps, diagrs., ills., index. Bureau of Education, Manila, 1915.

RINNE, F. **Reisebilder aus Java und Celebes.** Maps, ills. *Mitt. der Gesell. für Erdkunde zu Leipzig für das Jahr 1913,* pp. 99-118.

RUTTEN, L. **Reisherinneringen uit Zuid-Oost Boelongan (Oost-Borneo).** Map, ills. *Tijdschr. Kon. Nederl. Aardrijk. Genoot.,* Vol. 33, 1916, No. 2, pp. 236-253.

SHELFORD, R. W. C. **A naturalist in Borneo.** Edited with a biographical introduction by E. B. Poulton. xxviii and 331 pp.; ills., index. E. P. Dutton & Co., New York, 1917. $5.00. 9 x 6. [Chiefly biological, but containing a chapter on the natives of Borneo and some discussion of the phytogeography and zoögeography of the island, by the late curator of the Sarawak Museum.]

SHERFESEE, W. F. **Annual report of the Director of Forestry of the Philippine Islands for the fiscal year ended December 31, 1915.** 91 pp.; maps. Dept. of the Interior, Manila, 1916. [Contains abstract of a forest reconnaissance of the Agusan Valley, northern Mindanao (pp. 52-60), accompanied by a map, 1:350,000. The original detailed report will be published in Spanish as a special circular.]

SWAAB, J. L. M. **De onderafdeeling Redjang der residentie Benkoelen.** Map. *Tijdschr. Kon. Nederl. Aardrijk. Genoot.,* Vol. 33, 1916, No. 1, pp. 57-69. [Sumatra.]

WALLIS, B. C. **The rainfall of Java.** Maps, diagrs., bibliogr. *Scottish Geogr. Mag.,* Vol. 33, 1917, No. 3, pp. 108-119.

WESTER, P. J. **The food plants of the Philippines.** Ills. *Philippine Agric. Rev.,* Vol. 9, 1916, No. 3, pp. 150-256. Manila. [Abstracted in the April, 1917, *Review,* Vol. 3, p. 326.]

—— ***Luzon, Southwestern, and Mindoro.*** 1:400,000. *U. S. Coast and Geodetic Survey Chart No. 4714.* Washington, D. C., 1916.

—— ***Philippine Is. Cotabato to Sarangani Bay, South Coast of Mindanao. Surveys to 1916. Mindanao River region from surveys by U. S. Engineers in 1907.*** 1:200,000. *U. S. Coast and Geodetic Survey Chart No. 4607.* Washington, D. C., 1917.

—— ***Philippine Islands, New library atlas map of.*** 1 in. to 36 mi. (1:2,280,960). Insets: Manila and Vicinity [1:380,160]; Manila [1:26,400]; Batan and Babuyan Is. [1:3,168,000]; Concise Map of the Philippine Islands and the China Sea [1:15,200,000]. Rand McNally & Co., Chicago, 1913.

—— ***Philippine Islands: Palawan to Culion Island, including Linapacan Strait. Surveys to 1916.*** 1:100,000. *U. S. Coast and Geodetic Survey Chart No. 4315.* Washington, D. C., 1917.

—— ***Philippine Islands, Southeastern Part. Surveys to 1916.*** [1:800,000.] *U. S. Coast and Geodetic Survey Chart No. 4708.* Washington, D. C., 1917.

—— ***Puerto Princesa, East Coast of Palawan, Philippine Islands.*** 1:40,000. *U. S. Coast and Geodetic Survey Chart No. 4343.* Washington, D. C., 1917.

—— ***Western Masbate, Philippine Islands.*** [1:100,000.] *U. S. Coast and Geodetic Survey Chart No. 4412.* Washington, D. C., 1917.

## PHYSICAL GEOGRAPHY

### METEOROLOGY AND CLIMATOLOGY

PETTERSSON, HANS. **Meteorological aspects of oceanography.** Map, diagr. *Monthly Weather Rev.*, Vol. 44, 1916, No. 6, pp. 338-341.

The climatic effects of the ocean are widely recognized. Yet in weather forecasting but little practical application has been made of observations of the temperatures and movements of ocean water. The thermal functions of the ocean are the accumulation and redistribution of solar heat more evenly in time and space. Dr. Pettersson likens the ocean to a savings bank for solar energy, ''receiving deposits in seasons of excessive insolation and paying them back in seasons of want.'' This bank ''has a very extensive foreign exchange . . . . the annual 'dividends' paid by this bank to its 'share-holders,' i. e. the continents round its borders, are emitted on a variable scale.''

''Besides trying to predict the extremely variable state of the fickle atmosphere one should give more attention to the *conservative element* in meteorology, viz. the surface sheet of the ocean, where changes may be observed months before their effect on our weather becomes manifest.'' For example, ''a sensible departure from the average value of the vast amount of stored heat carried through this [Florida] strait . . . . might have profound effects on the weather of the following months both on the European and the North American continents'' (cf. *Geogr. Rev.*, Vol. 2, 1916, pp. 249-255). Similar observations off the coasts of Formosa would no doubt be of corresponding value for predicting the weather of Japan.

Atmospheric circulation is particularly intensified in regions where a cold and warm current meet, as off Newfoundland, or where a warm current runs along the mountainous ridges at the edge of a winter continent, as near the northwest Scandinavian coast. Changes in air circulation intensity probably follow closely on the changes of water temperature. Furthermore, observations of water temperatures may be of aid in the daily forecasting because of the effects on storm tracks. The effects of changes in ocean temperatures on rainfall are not so definite as are those on temperature and winds, but it seems evident that a reduction of evaporation from the North Atlantic by an abnormal lowering of its temperature over large areas might presage a dry season.

CHARLES F. BROOKS

ARCTOWSKI, HENRYK. **The pleionian cycle of climatic fluctuations.** *Proc. 2nd Pan American Sci. Congress, Dec. 25, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 172-179 (discussion, pp. 177-179). Washington, D. C., 1917.

BARBATO, GERMÁN, JR., AND PEDRO ESQUERRÉ. **Iniciación al estudio de la relación heliometeorológica.** *Proc. 2nd Pan American Sci. Congress, Dec. 27, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 561-570. Washington, D. C., 1917.

GALÁN, ANTONIO. **Fluctuaciones climatológicas en los tiempos históricos.** *Proc. 2nd Pan American Sci. Congress, Dec. 27, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 475-481. Washington, D. C., 1917.

HUNTINGTON, ELLSWORTH. **Solar activity, cyclonic storms, and climatic changes.** Maps, diagrs., bibliogr. *Proc. 2nd Pan American Sci. Congress, Dec. 27, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 411-431 (discussion, p. 431). Washington, D. C., 1917.

KIMBALL, H. H. **Measurements of solar and sky radiation.** Diagrs., ill., bibliogr. *Proc. 2nd Pan American Sci. Congress, Dec. 27, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 549-561 (discussion, p. 561). Washington, D. C., 1917.

SHAW, NAPIER. **The meteorology of the globe in 1911.** Diagrs. *Quart. Journ. Royal Meteorol. Soc.*, No. 179, 1916, Vol. 42, pp. 137-152. [Noted in the *Review*, Vol. 1, 1916, p. 464.]

SMITH, J. W. **Predicting minimum temperatures.** *Monthly Weather Rev.*, Vol. 45, 1917, No. 8, pp. 402-407.

TAYLOR, G. I. **The formation of fog and mist.** Maps, diagrs., ills. *Quart. Journ. Royal Meteorol. Soc.*, No. 183, Vol. 43, 1917, pp. 241-268.

TOLLEY, H. R. **Frequency curves of climatic phenomena.** Diagrs. *Monthly Weather Rev.*, Vol. 44, 1916, No. 11, pp. 634-642. [Abstracted in the September, 1917, *Review*, Vol. 4, p. 222.]